WHAT HAPPENS TO THE WHERE, WHEN AND HOW IN MALAY?

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In this thesis, I analyze three positions of the *w*h-word in Malay and attempt to explain what accounts for the differences between them. Specifically, I consider if the movement of the *w*h-interrogative is really *w*h-movement or if something else is going on. In regard to the the in-situ *w*h-words and the partially moved *w*h-words, I consider whether these move covertly and if they do, if this is feature movement or covert phrasal movement.

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CHAPTER 1

INTRODUCTION

1. Proposal

1.1 Three types of questions.

There are three positions for the *wh*-word in Malay. There is overt movement to the Specifier position of the matrix clause, *wh*-in-situ and partial *wh*-movement. These three positions are exemplified below:[1]

(1) Overt movement

Siapa$_i$ [John harap t_i akan beli baju untuknya]]?

who John hope will buy clothes for him

'Who does John hope will buy clothes for him?'

The *wh*-word has moved from its base position as the subject of the complement clause, indicated by the trace(t), to the Specifier position in the matrix clause.

(2) *Wh*-in-situ

John memberitahu kamu tadi [Mary baca apa]?

John told you just now Mary read what

'What$_i$ did John tell you just now that Mary was reading t_i ?'

Although the translated English interrogative has been preposed to the Specifier position of the Complementizer Phrase (henceforth Spec CP), the actual Malay question has the *wh*-word in the same base position as dictated by its grammatical function, that is, the *wh*-word *apa* (*what*) remains as the complement of the verb *baca*.

(3) Partially-moved wh-phrase

John memberitahu kamu tadi [CP apa$_i$ [IP Mary baca t_i]]?

John told you just now what Mary read

'What did John tell you just now that Mary was reading?'

Partial *wh*-movement is not found in English interrogatives. In Malay however, it has been shown that the *wh*-interrogative can move from being the complement of the Verb Phrase (henceforth VP) to the beginning of the very next clause. So overtly it appears to be very much like full wh-movement; the only difference being that instead of moving to the Specifier position of the matrix Complementizer Phrase (henceforth CP), the interrogative *wh*-word moves to the Specifier position of the subordinate CP.

1.2 Goals of the paper.

In my thesis, I would like to analyze these three positions of the *wh*-word in Malay and attempt to explain what accounts for these differences. Specifically, I would like to consider if the movement of the *wh*-interrogative is really *wh*-movement or if something else is going on. As for the in-situ *wh*-words and the partially moved *wh*-words, I would like to discover if these move covertly and if they do, if this is feature movement or covert phrasal movement.

2. Theoretical Assumptions

2.1 Overt movement.

So three types of movement are identified. Overt movement is noted when a syntactic unit is pronounced in a different position than expected. The original position is the 'trace' - it is not pronounced. However, the pronunciation position always c-commands the trace position. Overt movement is phrasal because the moved constituent is either a word or a group of words.

2.2 Covert movement.

Covert movement is also phrasal because although we cannot see the movement in the pronunciation pattern of the construction, the moved constituent is either a word or a group of words. We can identify covert movement through a simple islandhood test. Islands block movement. An island is a syntactic structure which no constituent can be

extracted from. So movement of a constituent out of islands will result in the ungrammaticality of a sentence. This helps to see if there is covert movement.

Thus covert movement that crosses a particular island boundary, such as that of a Complex Noun Phrase or a negation clause, will result in the ungrammaticality of the sentence. Consider two examples that might help illustrate this:

(4) Wh-in-situ in Relative Clause in Japanese:

Kimi-wa [[NP dare-ga kai ta] hon]-o yomi-masi-ta ka

you who write book-acc read Q

'You read books that who wrote?'

(5) Wh-in-situ in Relative Clause in Chinese:

ni xihuan [NP nage [CP t_i yao mai shenme] OP_i de ren_i]

you like that want buy what Comp man

'You like the man who wants to buy what?'

These two questions are taken from Cole and Hermon (1998). We note that the *wh*-interrogatives are all arguments or Noun Phrases (henceforth NP) and are all inside a Relative Clause island. The two constructions in the two languages are grammatical. This would indicate that there has been no movement, not even covert movement. If there was covert phrasal movement, the movement would have had to cross over the Relative Clause island, and this should result in the ungrammaticality of the constructions.

Perhaps this is what is happening in the next two examples:

(6) *ni zui xihuan [weishenme mai shu de ren]?

you most like why buy book Comp man

'*Why$_i$ do you like [the man who bought the books t_i]?'

(7) *Anataha suki [naze kau honwo hito]?

you like why buy book the man

'*Why$_i$ do you like [the man who bought the books t_i]?'

In the two examples given above, the *wh*-words in Chinese and Japanese for *why* do not move overtly, that is, there is no physical phonological evidence of movement. However, it can be discerned that there has been covert movement because the sentences are ungrammatical. Since there does not seem to be any physical evidence of movement out of the Relative Clause indicated in the brackets, the ungrammaticality of the two sentences provides some evidence that the movement of the *wh*-words out of the island is covert.

2.3 Feature movement.

Feature movement is also covert in that there is no phonological effect of the movement. However, unlike covert phrasal movement, an entire word or group of words do not covertly move. Instead, just the relevant grammatical features of a word move to the higher clause. Features on syntactic heads behave like 'attractors' because these attract features lower in the syntactic tree and forces them to move to higher positions. Since feature movement is more economical than covert phrasal movement, it is the preferred type of movement.

The Economy Principle requires that syntactic representations should contain as few constituents and syntactic derivations like movement should involve as few grammatical operations as possible. So covert feature movement is more economical than covert phrasal movement, because feature movement involves movement of just a particular feature like the [+*wh*] feature while phrasal movement involves movement of all the grammatical features of the phrase, everything except the phonological features. Later on in the discussion I will take up the question as to whether feature movement really exists - if there is really movement going on or not.

2.4 Phonological Form (PF) and Logical Form (LF).

This outline of the PF and LF components is in line with Chomsky's (1995) framework. The PF component of a grammar is the component that converts all the syntactic structures produced by merger and movement operations into PF representation, that is, into a representation that is usable by the articulatory-perceptual mechanisms responsible for speech.

The LF component of a grammar is the component that converts the syntactic structures produced by merger and movement operations into a semantic representation. When there is a movement operation that applies in the LF component, Chomsky (1995) explains that this movement will not affect the phonetic form of the sentence, since the PF component has already been processed.

2.5 Unselective Binding.

This is a proposal made by Baker (1970) who exemplifies Unselective Binding this way:

(8) Who read what? ----- [[Comp $Q_{i,j}$ who_i] t_i read $what_j$]

So in a binary question in English, for Baker, the *what* does not move but is unselectively bound or is coindexed with the Q morpheme, which allows it to remain in-situ. Cole and Hermon (1998) outline the operation of Unselective Binding as a question operator binding the *wh*-variable:

(9) OP_x [... x ...]

The null Question (henceforth Q) operator acts as the operator binder and binds the *wh*-variable in its scope. So an important premise of Unselective Binding is that there is no movement of the *wh*-word, not even covert movement. Instead the *wh*-word in its base position is coindexed with a null Q operator.

2.6 Quantifiers.

Haegeman (1991) provides some explanation of quantifiers. She uses a simple example like the following:

(10) Mary likes everyone.

The sentence contains the quantified NP *everyone*. Quantifiers are operators that bind variables. Haegeman (1991) makes this claim because the semantic interpretation of (10) would be something like 'for every person x it is the case that Mary likes x'. The LF representation of the sentence reflects this interpretation:

(11) [IP Everyone$_i$ [IP Mary likes t_i]]

This operation is called quantifier raising. By raising the quantifier to the A-bar position(that is, a nonargument position or a position that can be occupied by expressions that are not arguments), the quantifier binds its trace in the base position.

May (1985) defines *wh*-constructions as quasi-quantifiers, since *wh*-constructions and true quantifiers share certain important similarities. Both contain traces that are coindexed with the phrases moved to positions outside the predicate's argument positions. This is known as the A-bar position, which is differentiated from A-position. May provides examples of both constructions:

(12) Movement of *wh*-phrase

[S' [COMP who$_i$] [S did John see [NP t_i]]]

(13) LF-representation of true quantifier-phrase

[S' [NP everyone$_i$] [S John saw [NP t_i]]]

The structural similarities are notable in the two constructions. Furthermore, in both cases, the *wh*-phrase in COMP and the quantifier NP have scope over the traces because they c-command the traces.

2.7 Scope-marking.

Haegeman (1991) illustrates scope-marking with the following example:

(14) Everyone was looking at someone.

This sentence is ambiguous because there are two interpretations:

(15) For everyone x, there is someone y, such that x was looking at y.

(16) There is someone y, such that everyone x, x was looking at y.

In (15) there may be different pairs of persons that were looking at someone different but in (16) there is just one person that everyone was looking at. The ambiguity arises because different quantifiers have wider scope based on their particular LF representation. The two LF representations for (15) and (16) are:

(17) [IP everyone$_i$ [IP someone$_j$ [IP t_i was looking at t_j]]]

(18) [IP someone$_j$ [IP everyone$_i$ [IP t_i was looking at t_j]]]

So (15) has the LF representation of (17). *Everyone* has wide scope because it takes scope over *someone*. So *someone* has narrow scope. But (16) has the LF representation of (18) and now *someone* has wide scope over *everyone*. The ambiguity is based on which quantifier has wider scope.

CHAPTER 2

WH-IN-SITU IN MALAY

1. Arguments by Cole and Hermon (1998)

1.1 Islandhood test.

Cole and Hermon (1998) suggest that the *wh*-in-situ in Malay does not move at all. They provide two tests that can be used to reveal if movement, either overt or covert, has occurred. First, *wh*-movement can have the effect of creating *wh*-islands. A *wh*-island is a clause headed by the *wh*-phrase which nothing else comes out of. Cole and Hermon show that the *wh*-in-situ does not actually move covertly because this covert *wh*-movement should create a *wh*-island that would block any other overt movement. Consider the following example:

(19) Kamu fikir [siapa suka [perempuan [yang tinggal di mana]]?
you think who like woman that live at where
'Who do you think likes the woman that lives where?'

The *wh*-in-situ is in the relative clause. If there is covert movement of the *wh*-phrase *di mana* (*where*) to the matrix position, then this covert movement should block other instances of movement to the same matrix or scopal position. However examples like the one below show that this is not the case with Malay *wh*-in-situ:

(20) Siapa$_i$ kamu fikir [t_i suka [perempuan [yang tinggal di mana]]]?
who you think like woman that live at where
'Who do you think likes the woman that lives where?'

The *wh*-word *siapa* (*who*) has moved overtly to the scopal position and the sentence is still grammatical. If the *wh*-in-situ moves covertly, creating a *wh*-island covertly in the matrix clause, then this second overt movement of the *wh*-phrase should be blocked. The fact that it is not blocked seems to indicate that the *wh*-in-situ did not move at all, not even

covertly. This is used as the first test by Cole and Hermon (1998) to suggest that there is no covert movement with the *wh*-in-situ.

1.2 *Meng*- deletion.

The second test Cole and Hermon (1998) use is the *meng*- deletion test. *Meng*- is the transitive marker in Malay. It is a prefix attached to the verb. Cole and Hermon show that this prefix is deleted when there is movement. So they use examples like the ones below to note what happens with the Malay *wh*-in-situ:

(21) Ali memberi Fatimah apa?
Ali Meng-give Fatimah what
'What did Ali give Fatimah?'

(22) Apa$_i$ Ali beri Fatimah t_i ?
what Ali give Fatimah
'What did Ali give Fatimah?'

There is no deletion of the *meng*- prefix in (21) with the *wh*-in-situ but in (22), where there is the overt movement of the *wh*-phrase *apa* (*what*), there is also *meng*- deletion. So Cole and Hermon (1998) use this as the second test to prove that there is no movement involved in Malay *wh*-in-situ questions. Instead, they argue that the strong Q is just coindexed through Unselective Binding with the *wh*-variable in the base position. I take a similar stance with regard to the *wh*-in-situ in Malay.

2. My Arguments For Unselective Binding

2.1 Contrast between *wh*-arguments and *wh*-adjuncts.

In languages like Malay, Chinese and Japanese, when there is a *wh*-in-situ inside an island, it seems that the sentence is good only if the *wh*-phrase is an argument but the sentence becomes ungrammatical if the wh-phrase is an adjunct. This is exemplified in the following two examples:

(23) *Wh*-in-situ in Relative Clause in Japanese:

Kimi-wa [[dare-ga kai ta] hon]-o yomi-masi-ta ka

you who write book-acc read Q

'You read books that who wrote?'

(24) *Wh*-in-situ in Relative Clause in Chinese:

ni xihuan [NP nage [CP t_i yao mai shenme] OP_i de ren_i]

you like that want buy what Comp man

'You like the man who wants to buy what?'

These two questions are taken from Cole and Hermon (1998). The *wh*-interrogatives are all arguments or NPs and are inside a Relative Clause island. The two sentences are grammatical. This would indicate that with the *wh*-phrase that is an argument, there has been no movement, not even covert movement. If there was covert phrasal movement, the moved *wh*-phrase would have had to cross over the Relative Clause island, and this would result in the ungrammaticality of the constructions.

The same ungrammaticality would have resulted if the movement was covert feature movement. Islandhood constraints would still have been violated because a particular feature would be crossing the island boundary. So any kind of movement - overt or covert phrasal movement or feature movement - would result in the unacceptability of the sentences. This is what happens with the *wh*-adjuncts. Consider the two examples below:

(25) *Wh*-in-situ in Relative Clause in Chinese:

*ni zui xihuan [weishenme mai shu de ren]?

you most like why buy book Comp person

'*Why do you like [the man who bought the books t]?'

(26) *Wh*-in -situ in Relative Clause in Japanese:

*Anataha suki [naze kau honwo hito]?

you like why buy book the man

'*Why do you like [the man who bought the books]?'

As in the earlier examples, the *wh*-phrase remains in-situ. With the *wh*-arguments in examples (23) and (24), the sentences are grammatical. Now with the *wh*-adverbs, the same in-situ constructions are ungrammatical. Recall that the test proposed to note if covert phrasal movement has occurred is the test with islandhood constraints. The fact that these two sentences, that is (25) and (26), are ungrammatical seems to indicate that the adjunct, unlike the *wh*-NP complement, moves covertly in *wh*-in-situ languages. The adjunct moves covertly to Specifier position, thus violating island boundaries. As a result, the sentences are unacceptable.

Huang (1982) argues that this is covert LF movement. Huang shows that the *wh*-adjunct that remains in-situ in Chinese like in example (25) is comparable to the English example:

(27) *How$_i$ did you feel satisfied after [he fixed the car t_i]?

The difference is that in English, the adjunct extraction can be observed since it is an overt island violation. In the Chinese example, the island violation is covert.

As such, it seems that in *wh*-in-situ languages, the wh-NP does not move, not even covertly at LF. However the examples with Chinese and Japanese *wh*-adverbs seems to indicate that there is covert movement of the *wh*-adjunct.

I agree with Cole and Hermon (1998) that the *wh*-NP that is in-situ is unselectively bound in its base position. This means that the in-situ *wh*-phrase is coindexed with a Q operator. No movement is involved, not even covert movement at LF. However, the examples I have considered thus far indicate that Unselective Binding is only available

for arguments. Adjuncts cannot be unselectively bound, so these are forced to move. Since there is no overt movement in languages like Chinese and Japanese, these *wh*-adverbs move covertly and so cause the ungrammaticality of sentences (25) and (26).

Moreover, what is covertly noted in Chinese and Japanese is overtly seen in Malay. In Malay, only arguments or *wh*-NPs can stay in-situ and be unselectively bound. *Wh*-adverbs in Malay must move overtly to the Spec CP position. Consider the four examples below:

(28) John masak tofu kelmarin.
John cook/fry tofu yesterday
'John cooked/fried tofu yesterday.'

(29) Kelmarin John masak tofu.
yesterday John cook/fry tofu
'Yesterday John cooked the tofu.'

(30) *John masak tofu bagaimana?
John cook tofu how
*'How does John cook the tofu?'

(31) Bagaimana$_i$ John masak tofu t_i?
how John cook tofu
'How does John cook the tofu?'

Examples (28) and (29) first show that it is not the case that all adverbs in Malay must move to the sentence-initial position. It is just that *wh*-adverbs or *wh*-adjuncts must move to the sentence-initial clause. Example (28) indicates that the non *wh*-adjunct can remain in-situ and that this is its base or original position. Then in example (29) the adjunct moves to the Specifier position and it is still grammatical. So non *wh*-adjuncts have two positions - these can either remain in-situ or move to the Specifier position.

The problem occurs with *wh*-adjuncts. In example (30), the *wh*-adjunct is left in-situ and the sentence is unacceptable. When this *wh*-adjunct is overtly moved to the Specifier position, the sentence is grammatical.

It could perhaps be claimed that the *wh*-adjunct is merged in that Specifier position, and so there is actually no movement. However, example (28) indicates that adjuncts are base generated in the bottom or post-verbally and then move overtly to the Specifier position. The same applies for *wh*-adjuncts. *Wh*-adjuncts are not base generated in the Specifier position but move there from their in-situ position at the bottom of the syntactic structure.

The requirement is that the *wh*-adjunct cannot remain in-situ. Let us just imagine that there is no such thing as Unselective Binding, that is, that there is just overt or covert movement. Then it must be claimed that in (30) there is overt movement and in (31), there is covert movement of the *wh*-adjunct. If there is covert movement of the *wh*-adjunct in (31), the sentence should be grammatical, since the requirement that the *wh*-adjunct not remain in-situ has been satisfied. Covert phrasal movement is exactly like its counterpart - overt phrasal movement - the only exception being that covert phrasal movement is not realized in the pronunciation pattern. However, since sentence (31) is still ungrammatical, it might be argued that the adjunct is not covertly moving, but is being unselectively bound like a complement, and that this is what results in the ungrammaticality of the sentence. This provides more evidence for the existence of Unselective Binding.

So the four examples (28) - (31) indicate that first, the *wh*-adjunct like a non *wh*-adjunct is base generated post-verbally. Second, the *wh*-adjunct is different from the *wh*-argument in that it cannot be unselectively bound. Third, evidence for the existence of Unselective Binding comes from example (31). The ungrammaticality of the sentence seems to be because the *wh*-adjunct remains in-situ. This in turn shows that it is

being unselective bound or in other words, that there is no movement at all of the *wh*-word; it is bound in-situ.

In the three languages examined this far, it can be argued that *wh*-NPs or complements do not move covertly but are unselectively bound. *Wh*-adverbs cannot be unselectively bound and so are forced to move. When these are unselectively bound, as in example (31), the sentence is ungrammatical. The contrast between *wh*-arguments and *wh*-adjuncts is one piece of evidence that the *wh*-in-situ in Malay is unselectively bound. Since only *wh*-arguments are used to form Malay *wh*-in-situ questions, these *wh*-in-situ variables in Malay can be unselectively bound by a question operator and so, remain in-situ.

2.2 Can the operator and the variable be separated?

Conducting a small test that determines if the operator and the wh-variable can be separated serves as another piece of evidence for Unselective Binding. This test was conducted by Cole and Hermon (1998). In Chinese, a *wh*-variable can be bound by different operators. It does not have to be bound only to the question operator. Note the example below, taken from Aoun and Li (1993):

(32) Wo shenme dou bu zhidao.
I what all not know
'I don't know anything.'

The variable *what* is bound by a non-interrogative operator and so does not have a interrogative meaning. In Malay, only complements or arguments can have the operator and the variable separated. The Malay wh-argument can be bound by a non-interrogative operator:

(33) Dia tidak suka apa-apa.
he not like what-what.
'He did not like anything.'

(34) Dia tidak suka apa pun.

he not like what also

'He did not like anything.'

In these examples, the *wh*-variable is bound by the existential operator; first with the reduplication of the *wh*-word and then by adding to the *wh*-word the word *pun* (*also*). So the *wh*-variable is being coindexed with the existential operator. The same cannot be done with *wh*-adjuncts in Malay:

(35) *Dia tidak suka bagaimana-bagaimana.

He not like how how

*'He did not like it however.'

(36) *Dia tidak suka bagaimana pun.

He not like how also

*'He did not like it however.'

This could be another reason why arguments and adjuncts have different distributions. Following Cole and Hermon (1998) one could say that *wh*-NPs in Malay are variables bound by the null question operator and so the *wh*-variable can be bound by a different operator.

The structure for the *wh*-argument then is OP...VAR where the *wh*-variable is not merged with the operator, which thus allows the *wh*-variable to be bound by Unselective Binding by a question operator or a different operator like the existential operator. However, *wh*-adverbs have both the null question operator and the wh-variable lexicalized as one single word. The *wh*-adjunct has the structure OP+VAR where the Q operator and the *wh*-variable are merged as a single unit and so the *wh*-adjunct is unable to be bound by Unselective Binding.

With arguments, the question operator or the existential operator can bind the *wh*-variable in-situ, thus suggesting that the *wh*-variable is unselectively bound. On the other hand, since the two are bound as one element for *wh*-adverbs, the operator cannot unselectively bind the *wh*-variable.

2.3 Scope-marking test.

More evidence that Unselective Binding is only available for arguments comes from scope marking.[2] Consider the following question:

(37) What$_i$ did each man buy t_i ?

Example (37) has a *wh*-argument that has moved overtly, leaving behind a trace. A question like this could be read as being ambiguous.[3] We could have a multiple pair-list response like 'John bought a clock, Bill bought a T-shirt, Steve bought a cup,...' This is the case because if the trace is interpreted, then *each man* has wide scope and this is the semantic representation:

(38) Interpret the trace of *what*:

for each man it is the case that he bought something

However, if the *what* is interpreted, then *what* has wide scope and this is the semantic representation:

(39) Interpret the *what*:

it is the case that there is something that each man bought

With this representation a single-pair response like 'each man bought a book' is elicited. So depending on which quantifier has wider scope, either the *wh*-phrase *what* or *each man*, the meaning is different. It is clear however, that in both (38) and (39) the quantifier that has wider scope c-commands the lower quantifier. So in (39) *what* has wider scope and it c-commands *each man* and in (38) *each man* has wider scope and it c-commands

the trace of *what*. Since Malay allows *wh*-arguments to remain in-situ, pairs of questions like these are possible:

(40) Apa_i setiap lelaki beli t_i ?

What each man buy

'What did each man buy?'

(41) Setiap lelaki beli apa?

each man buy what

'What did every man buy?'

Example (40) elicits the single-pair response. Later on in my discussion of fully moved *wh*-phrases, I will discuss this particular reading. But for now, it is clear that in (40) only the *apa* (*what*) is interpreted. *apa* takes wide scope, which is how the single-pair response is elicited. There is an interesting difference in example (41). The in-situ *wh*-word allows for a multiple pair-list reading.[4] This is because the scope marker is *setiap lelaki* (*each man*). So it is possible to have:

(42) interpret the *setiap lelaki*:

for each man it is the case that he bought something

This elicits a response like 'Bill bought a pen, Steve bought a T-shirt,...' The single pair reading is less probable - that each man just bought the one same thing.

If there is covert movement of the *wh*-in-situ, then *apa* (*what*) should be able to take wider scope and allow for this reading. This would mean that the *wh*-in-situ moves covertly to the Specifier position and it would have wider scope over *setiap lelaki* (*each man*). Since only the multiple pair-list reading is preferred, it can be argued that the *wh*-in-situ does not move covertly but is unselectively bound.

3. Conclusion

This far, I have attempted to demonstrate that arguments and adjuncts have different distributions. The *wh*-NPs that are arguments can remain in-situ. The adjuncts or *wh*-adverbs cannot; these must move either overtly or covertly. This is noted in the three languages - Chinese, Japanese and Malay. With the *wh*-in-situ arguments, there is no form of movement going on, not even covert feature movement. Instead, the *wh*-in-situ is unselectively bound by the null question operator.

Evidence for Unselective Binding comes first from this contrast between *wh*-arguments and *wh*-adjuncts. Second, it is evidenced from the test that shows that for *wh*-arguments, the question operator and the *wh*-variable can be separated and the *wh*-variable can be bound by the existential operator. Third, the scope-marking test indicates that there is no covert movement of the *wh*-argument in Malay. With these three sets of arguments, I have attempted to show that the *wh*-argument in Malay can remain in-situ. It does not move covertly but is unselectively bound in its in-situ position. The next step would be to determine what happens with overt *wh*-movement in Malay.

CHAPTER 3

OVERT *WH*-MOVEMENT IN MALAY

1. Arguments by Cole and Hermon (1998)

1.1 Similar to English overt movement.

Cole and Hermon (1998)argue that overt *wh*-movement in Malay to the Specifier position of the matrix clause is similar to overt *wh*-movement in English. They state that as in English, Complementizer has a strong Q affix and since Q carries a [+*wh*] Specifier feature, the *wh*-interrogative phrase, which has the head feature [+*wh*], moves or raises from the complement position of the VP to the Specifier position of the Complemetizer. Then the [+*wh*] Specifier feature of Q can be checked and erased, since Specifier features have no intrinsic semantic content and are not interpretable at LF.

1.2 Islandhood test.

As a result of the overt movement of the *wh*-question to the scopal position of the matrix clause, a *wh*-island is created. Furthermore, the overt movement of the *wh*-phrase will block other *wh*-movements. Consider the example below:

(43) Siapa$_i$ kamu fikir t_i suka makan apa?

who you think like eat what

'Who do you think likes to eat what?'

The overt movement of the *siapa* (*who*) blocks the movement of the other *wh*-phrase *apa* (*what*) which has to remain in-situ. Furthermore, the overt movement of *siapa* also creates a *wh*-island.

1.3 *Meng*- deletion.

The overt movement of the *wh*-phrase results in the deletion of the *meng*- prefix:

(44) Di mana$_i$ Ali (?mem) beli tofu t_i ?

where Ali buy tofu

'Where did Ali buy the tofu?'

The *wh*-phrase has been overtly moved to the Specifier position and the verb *beli* needs to have the *meng-* prefix deleted. (43) becomes less acceptable if the *meng-* prefix is maintained. Cole and Hermon (1998) use this as another test to suggest that there has been *wh*-movement.

2. My Arguments for Clefting

2.1 Boskovic's (1998b) scope-marking test.

It seems clear enough that there is movement in the Malay questions that have the *wh*-phrase overtly fronted. When the sentence is reconstructed, the moved *wh*-phrase can be placed in its initial or trace position, moving it back from its current overt position:

(45) Apa$_i$ John kata dia beli t_i di pasar?

what John say he buy at market?

'What did John say that he bought at the market?'

(46) John kata dia beli apa di pasar?

John say he buy what at market

'What did John say that he bought at the market?'

In (44) the *wh*-phrase is in the Specifier position but in (45) the reconstructed *wh*-phrase is back in its trace position. Both constructions are grammatical. So movement has clearly occurred.

However, the question is whether this movement is really *wh*-movement. As explained earlier, in English it is *wh*-movement because the Complementizer (henceforth C) constituent contains the strong question operator Q, and since Q is strong, it needs an

overt *wh*-head. This results in the overt movement of the *wh*-word or phrase in English. But is this what is happening in Malay as well?

Boskovic's (1998b) scope-marking test provides an alternative argument. Consider the following question in English:

(47) Who_i bought t_i what?

The *who* moves to Spec CP, leaving a trace in its initial position. This movement is motivated by the strong Q in the C constituent. Boskovic (1998b) provides the following setting: you are standing outside a shop and you see one person buying something. You cannot then go into the shop and ask the shopkeeper 'who bought what?'. Boskovic shows how the question in (46) has only the multiple pair-list response. The question does not elicit a single-pair response.[5] However both responses are possible in Japanese. In Japanese the same question can have either a single-pair answer or a multiple pair-list answer:

(48) Dare-ga nani-o katta no?
who-nom what-acc bought Q
'Who bought what?'

This is further confirmed by French data. French allows for both overt *wh*-movement and in-situ *wh*-phrases. But only the in-situ questions can have a single-pair response:

(49) Il a donné quoi à qui?
he has given what to whom
'What did he give to whom?'

Boskovic (1998b) hypothesizes that the difference is a result of movement. The *wh*-phrase in (49) stays in-situ, so it is possible to get a single-pair response. Movement is a must in languages like English. Because of this movement, the single-pair response is

precluded and a pair-list reading is the only response possible. Boskovic's (1998b) semantic analysis of the scope-marking differences between *wh*-in-situ languages like Japanese and overt *wh*-movement languages like English is based on Hagstrom (1998). Hagstrom proposes that there is a QH morpheme that has two possible positions - one, where the QH is bound with the lower *wh*-phrase and the other, in a position above both *wh*-phrases.

It must be clarified that the QH morpheme that Hagstrom (1998) refers to is not the syntactic strong Q feature on the head Complementizer. Instead, this is a semantic Question morpheme that provides us with an explanation for why one sentence such as the Japanese multiple question in (48) can have two semantic readings. To minimize confusion I will refer to this semantic Q morpheme as QH.

In a *wh*-in-situ language, Hagstrom claims that the *wh*-phrase does not move at all. Instead, it is the QH morpheme that moves. To get a multiple pair-list response, QH is merged with the lower *wh*-phrase:

(50) C [WH1 V WH2 + QH]

Each *wh*-phrase has a set of propositions or members that have been applied to it. However, Hagstrom (1998) argues that the QH morpheme is an existential quantifier over choice functions. So the QH morpheme selects one proposition from the set of propositions. Since WH1 is outside the scope of the QH morpheme, it can generate a set of propositions and the multiple pair-list response is elicited.

But QH can move to take scope over both the *wh*-phrases:

(51) C [QH [WH1 V WH2]]

When comparing (50) and (51), it can be noted that the QH has moved to the higher clause. In (51), both *wh*-phrases are now in the scope of QH, and since QH is a choice

function, it picks one member from each set of propositions. This is Hagstrom's (1998) proposal for the single pair response.

So according to Hagstrom (1998), in *wh*-in-situ languages such as Japanese, a multiple question like (48) is ambiguous, in that it can either have a single-pair or multiple pair-list answer because of the position of QH. Contrary to earlier arguments by others like Huang(1982), it is not based on whether or not the *wh*-phrase itself moves covertly. When QH is merged with the lower *wh*-phrase, the multiple pair-list response is derived, and when QH moves and binds both *wh*-phrases in its scope, then the single-pair response is elicited.

Boskovic (1998b) uses this analysis to examine the loss of single-pair responses in English. But first he points out that since movement of QH is all that is necessary to satisfy the semantic requirement, overt movement of the *wh*-phrase in languages like English must be a purely syntactic requirement that *wh*-in-situ languages do not have. It is not required for the semantic interpretation.

The representation in (51)indicates that to get a single-pair response, the QH morpheme has to have scope over both the *wh*-phrases. This is the structure prior to movement of the *wh*-phrase in English. Since in English there is overt movement of the *wh*-phrase, this would mean that the *wh*-phrase has to cross over the QH morpheme; the structure of this is exemplified below:

(52) WH_i C QH [t_i wh]

As a result of moving across the QH morpheme, there is an intervening effect, also known as minimality which results in the loss of the single-pair response in multiple questions with overt *wh*-movement.

However it is still possible to get the multiple pair-list response, because for the multiple pair-list answer, the structure is as in (49). Even when WH1 moves to the

Specifier position, as in English, the choice function (QH) remains in the base position and WH1 is still free to generate a set of propositions:

(53) WH_i C [t_i V WH + QH]

The crucial question is how all this is related to overt *wh*-movement in Malay. Since Malay allows for both *wh*-in-situ and overt *wh*-movement, it should be true that in Malay, as in English, when the *wh*-phrase is overtly moved, only the multiple pair-list response is elicited. When the *wh*-phrase remains in-situ, then both the single-pair response and the multiple pair-list response should be possible.[6]

These are the two examples in Malay:

(54) John beli apa untuk siapa?
John buy what for whom
'John bought what for whom?'

(55) Apa_i John beli t_i untuk siapa?
what John buy for whom
'John bought what for whom?'

In (54), the *wh*-phrase stays in-situ and either a single-pair response or a multiple pair-list response is possible. This is expected, since Hagstrom's (1998) argument indicates that with the *wh*-in-situ, the QH morpheme can either be merged with the lower *wh*-phrase or be in a higher position, dominating the two *wh*-phrases. The two different positions of QH provide for the two different responses.

It should then naturally follow that example (55) would elicit just a multiple pair-list response since as in English, the *wh*-phrase is overtly moved to the Specifier position. Surprisingly, in (55), with the overtly moved *wh*-phrase, only the single-pair response is derived. This is the very opposite of English. Recall that the English multiple question in (47), repeated below, has only the multiple pair-list response:

(56) Who$_i$ bought t_i what?

The analysis by Boskovic (1998b) in (52) first shows why the single-pair response is unavailable in English. For convenience, this is also repeated below:

(57) WH$_i$ C QH [t_i wh]

To get to the Specifier position of the matrix clause, the *wh*-phrase would need to cross over the QH morpheme. Since the QH morpheme is like a null question operator, crossing over it results in the loss of a particular response, namely, the single-pair response. However the key point is that in English, this is *wh*-movement and the higher *wh*-phrase is crossing over a question operator. In (53), repeated below as (58), when the QH morpheme is merged with the lower *wh*-phrase, *wh*-movement of the higher *wh*-phrase still leaves this phrase free and unbound by the QH morpheme:

(58) WH$_i$ C [t_i V WH+Q]

As a result, it is possible to get the multiple pair-list reading in multiple questions in English. It is clear that with the Malay question in (55) there has been movement of the *wh*-phrase. However, since the opposite semantic response from that in English is what is observed, overt movement of the *wh*-phrase might not be a *wh*-movement operation like in English. Rather, it could be a clefting operation. It could be movement to create focus.

This alternative argument might explain the contrast with the arguments presented by Boskovic (1998b). Again, this is the structure of a multiple question construction that results in the loss of the single-pair response in languages like English:

(59) WH$_i$ C QH [t_i wh]

As explained above, this overt *wh*-movement in English is ultimately motivated because it is a syntactic requirement for the *wh*-phrase to move to Spec CP. If movement in Malay is a clefting operation, it does not matter if the *wh*-phrase crosses over the QH morpheme. The *wh*-phrase is merely moving to gain focus; it is not a *wh*-movement

operation like in English. So perhaps, in this case, the QH morpheme is not activated since the movement of the *wh*-phrase in Malay is not a wh-movement operation but a clefting operation. By clefting the *wh*-phrase to the matrix position, the single-pair response in Malay is still maintained.

So by reanalyzing the movement of the *wh*-phrase as clefting, the asymmetry between the analysis of *wh*-movement in English and Malay might be accounted for. Besides the evidence from Boskovic's (1998b) scope-marking test, there are other reasons that indicate that clefting might be a valid explanation for overt *wh*-movement in Malay.

2.2 Parasitic gaps.

Parasitic gaps are allowed in *wh*-cleft construction. Haegeman (1991) provides the following two examples of parasitic gaps:

(60) Poirot is a man whom you distrust when you meet.

(61) Poirot is a man that anyone that talks to usually likes.

(60) has a Complex Relative Clause with two verbs - *distrust* in the higher clause and *meet* in the adjunct clause. Both verbs are two-place predicates that assign an external and internal theta role. The internal arguments or the complements of the verbs are assumed to be null elements:

(62) Poirot is a man [CP whom [IP you distrust e1 [when [IP you meet e2]]]].

Now the type of null element represented by e1 and e2 must be identified. Both e1 and e2 occur in governed positions and are assigned the Accusative case. e1 is a *wh*-trace, since e1 can be coindexed with *whom.* This is exemplified below:

(63) Poirot is a man [CP whom$_i$ [IP I distrust t_i]].

e2 is more difficult to represent. The meaning of the sentence indicates that e2 and e1 are coreferential; that e2 is also bound by *whom*. If this is true, then this means that *whom* is the antecedent of e2 and e1. It is not possible that *whom* has been extracted from

two distinct positions. But clearly, e2 in some sense depends for its existence on the presence of e1. This is why when e1 is eliminated and replaced by a pronoun, the construction becomes ungrammatical:

(64) *Poirot is a man [CP whom$_i$ [IP you distrust him [CP when [IP you meet t_i]]]].

This is a characteristic of parasitic gaps. Non-overt elements like e2 depend for their existence on the presence of another null element. A parasitic gap is a null element whose presence depends on the existence of another gap in the sentence.

Parasitic gaps have an important property - the anti c-command condition. The coindexed trace must not c-command the parasitic gap and the parasitic gap must not c-command the trace. In other words, in example (62), e1 cannot c-command e2 and e2 cannot c-command e1. Cheng (1991) exemplifies this in Bahasa Indonesia (*pg* refers to the parasitic gap):

(65) Tulisan mana$_i$ yang John simpan t_i sebelum dia baca *pg*?

paper which that John file before he read

'Which paper did John file before reading?'

Cheng shows that the anti-c-command condition has been satisfied, and that the *pg* can be licensed. In (65), the trace of the fronted *wh*-phrase does not c-command the *pg*. Furthermore, neither does the *pg* c-command the *wh*-trace. So this licenses the parasitic gap in the *wh*-cleft construction. This example can be replicated for Malay:

(66) Buku apa$_i$ yang John buang t_i sebelum dia baca *pg* ?

book what that John throw away before he read

'Which book did John throw away before he read?'

The anti-c-command condition is satisfied and there is a parasitic gap in the overtly moved *wh*-construction. Since parasitic gaps are allowed in *wh*-cleft constructions, it provides

further evidence that questions like (66) that have the *wh*-phrase overtly moved are in fact cleft questions.

2.3 Boeckx's (1999) presupposition test.

Boeckx's (1999) analysis of French questions provide a possible argument for clefting in Malay. He supplies evidence that French in-situ questions and cleft questions pattern alike. Some *wh*-words in French have both strong and weak forms. So for example, the object *wh*-word *que* (*what*) can surface as *qu'* or *quoi*. In this way, it is similar to the third person pronoun *le* which has the weak and strong form *l'* and *ça*. Depending on the syntactic and prosodic context, only one form can surface in each type of construction.

Boeckx (1999) provides examples of the question-forming strategies in French:

(67) Fronting

Qu' as-tu vu?

What have you seen?

(68) Reinforced fronting

Qu' est-ce que tu as vu?

What is it that you have seen?

(69) In-situ

Tu as vu *quoi*?

You have seen what?

(70) Cleft

(C'est) *quoi* que tu as vu?

It is what that you have seen?

The *wh*-in-situ and the cleft question have the identical surface form of the object *wh*-word *que*. This is one piece of evidence showing that the *wh*-in-situ in French patterns in a

similar way with cleft questions in French. The second piece of evidence is interesting because it is related to Malay overt *wh*-movement and might help explain why it could be a clefting operation as well. Boeckx (1999) gives the following set of examples:

(71) Qu'a acheté Jean?

'What has Jean bought?'

(72) Jean a acheté quoi?

'Jean has bought what?'

While it is possible to respond to (71) by the statement 'nothing' in French, 'nothing' is not a possible response to the *wh*-in-situ question exemplified in (72). 'Nothing' is also an impossible response with cleft questions in French:

(73) (c'est) qui que tu as vu?

'(it is) who that you have seen?'

Boeckx (1999) notes a similar situation in an English *wh*-cleft construction like:

(74) What is it that John bought?

The response 'nothing' would also be infelicitous. Since *wh*-in-situ and cleft-questions in French are similar in that both are focused and so disallow an answer like 'nothing', Boeckx (1999) is lead to the conclusion that the *wh*-in-situ in French is a covert cleft construction.

In Malay, the cleft strategy that overtly fronts the *wh*-phrase is patterned in a similar way to the French *wh*-in-situ and cleft-questions. Focus is placed on the *wh*-phrase and the question carries with it a presupposition. So a response like 'nothing' is also strange in the Malay overtly moved *wh*-phrase.[7] Consider the following examples:

(75) Ali beli apa untuk Fatimah?

Ali buy what for Fatimah

'What did Ali buy for Fatimah?'

(76) Apa$_i$ yang Ali beli t$_i$ untuk Fatimah?

what that Ali buy for Fatimah

'What did Ali buy for Fatimah?'

(76) is a *wh*-in-situ question and 'nothing' is a felicitous reply. As discussed earlier, *wh*-in-situ in Malay is unselectively bound and so does not move covertly. As such the answer 'nothing' is an expected response and further strengthens our argument on Unselective Binding for the *wh*-in-situ in Malay.

The *wh*-in-situ in Malay is different from that of the French *wh*-in-situ. The fact that the *wh*-in-situ in French patterns with the cleft constructions in French indicates that there is covert movement of the *wh*-in-situ in French. This covert movement is motivated by a need for focus.

Malay *wh*-in-situ questions do not have that presuppositional element in them. A response like 'nothing' is acceptable. This serves as further evidence that unlike the French *wh*-in-situ, the Malay *wh*-in-situ does not move covertly; it is unselectively bound.

But with (76) where the *wh*-word is fronted, there is a presupposition that Ali has bought something for Fatimah and the inquirer merely wants to know what it is. So a response like 'nothing' would be strange, at the least. This leads me to the assumption that (76) is similar to the cleft constructions in French - both the overt cleft questions and the covert cleft questions (*wh*-in-situ). This parallel between French cleft questions and questions with fronted wh-phrases in Malay provides further evidence for the hypothesis that overtly moved *wh*-phrases in Malay could be cleft questions.

3. Conclusion

Cole and Hermon (1998) claim that overt *wh*-movement in Malay is similar to overt *wh*-movement in English. In both languages, the *wh*-movement is motivated by the need to check and delete the syntactic Q feature. In my arguments, I have attempted to

show that unlike overt *wh*-movement in English, *wh*-movement in Malay is a clefting operation. I have attempted to provide evidence for this claim by first using Boskovic's (1998) scope-marking test. Second, the test with parasitic gaps as elucidated by Cheng (1991) and third, Boeckx's (1999) presupposition test.

CHAPTER 4

PARTIAL *WH*-MOVEMENT IN MALAY

1. Four Characteristics of Partial Movement

1.1 Scope-marker.

The final part of this paper will be devoted to an analysis of partial *wh*-movement in Malay. When partial *wh*-movement in Malay is compared to partial *wh*-movement constructions in other languages, partial *wh*-movement in Malay does not have a scope-marker that is evident in these other languages.

Stepanov (in press) discusses the syntactic and semantic properties of interrogatives in Polish and Russian that contain two clauses, each featuring a *wh*-phrase. The answer they trigger does not involve supplying the value to the *wh*-phrase in the matrix CP. Rather, a felicitous answer involves supplying the value for the *wh*-phrase in the subordinate CP. Consider Stepanov's Polish example:

(77) Jak Piotrek sadzi, co studenci przeczytali?
how Peter judges what students read
'What does Peter believe the student read?'

The required response is similar to that motivated by the long-distance question indicated in the English translation. Partial *wh*-movement is identified by the presence of a scope-marker - the first *wh*-phrase *how* - that marks the second *wh*-phrase *what* as the real question. Stepanov (in press) provides a similar pattern with Russian examples:

(78) Kak vy dumaete, kogo ljubit Ivan?
how you think whom loves John
'Who do you think John loves?'

The fact that partially moved *wh*-phrases have scope-markers in Spec CP is also proven by McDaniel's (1989) German and Romani data. Below are two examples she has given, the former is in German and the latter is in Romani:

(79) Was glaubt Hans, mit wem$_i$ Jakob jetzt t_i spricht?
'WHAT does Hans believe with whom Jakob is now talking?'

(80) So o Demìri mislinol kas$_i$ i Arifa dikh a t_i ?
'WHAT does Demir think whom Arifa saw?'

In most languages that have partial *wh*-movement, the scope-marker is usually the *wh*-word meaning *what*, but the Polish and Russian examples in (76) and (77) have the *wh*-word meaning *how* as the scope-marker. So there are certain properties that are unique to certain languages with partial wh-movement but one property seems to be common - the need for a scope-marker. The examples given above attempt to illustrate this point.

1.2 *Wh*-chain.

Since there are two *wh*-phrases, it could be argued that in those languages that allow for partial *wh*-movement, there are actually two clauses made up of two separate questions conjoined at the level of discourse, like the English example:

(81) What do you think? Who does John like?

This is not the case, because in those languages that have partial *wh*-movement, the scope-marker and the partially-moved *wh*-phrase form a *wh*-chain. But it must be emphasized that the *wh*-chain is between the scope-marker and the clause headed by the *wh*-phrase, not just the *wh*-phrase itself.

1.3 C-commanding relationship.

The partially-moved *wh*-phrase is c-commanded by the scope-marker. As evidence of this, McDaniel (1989) points out that in German, the second clause has a verb-final word order, showing that this is a subordinate clause. This is noted in example (78) given

above. So the partial *wh*-movement construction in German is not a construction simply made up of two separate clauses that have two separate question words. Instead, the scope-marker and the partially moved *wh*-phrase form a *wh*-chain, and the scope-marker c-commands the subordinate wh-phrase.

In the Slavic languages, Stepanov (in press) argues that it is always possible to get a bound variable reading with partially moved *wh*-phrases. This is illustrated below, with the first example in Polish and the second in Russian:

(82) Jak [kazdy student]$_i$ my li, gdzie go $_i$ posla?

How every student thinks where him send-they

(83) Kak s itaet [ka dyj iz studentov] $_i$, kuda ego$_i$ mogut otpravit'?

How thinks every from student where him can send-they

'Where does every student think that they can send him?'

When in the scope of the quantifier *kazdy student*/*kazdy iz studentov* (*every student/everyone of the students*) that is in the higher clause, the pronoun *go*/*ego* (*him*) in the lower clause gets a bound variable reading. This would not be possible if these were two separate questions like in English:

(84) *What does [every student]$_i$ think? Where will they send him$_i$?

1.4 Clausal pied-piping.

Another common characteristic of partial *wh*-movement in the languages considered this far is that there is clausal pied-piping at LF. Consider again another Polish example given by Stepanov (in press):

(85) Jak my lisz, kogo Janek lubi?

how think-you whom John loves

'Who do you think John loves?'

As explained earlier, the answer involves supplying the value to the *wh*-phrase in the subordinate clause, which is also referred to as the 'true wh-phrase', and not to the scope-marker in the matrix clause. So the response is similar to the response for the long-distance question in the English translation 'who do you think John loves?'.

Stepanov (in press) indicates that this is the case because at LF, there is covert clausal pied-piping of the subordinate clause headed by the *wh*-phrase to the matrix position. This is not just a specific feature of Polish or Russian partial *wh*-constructions but seems to be evident in most languages that allow for partial *wh*-movement.

Since there is no scope-marker in Malay, there can be no *wh*-chain with the scope-marker c-commanding the partially moved *wh*-phrase. This serves to differentiate Malay from other partial *wh*-movement languages. Furthermore, there is no way of arguing that there is covert clausal pied-piping of the subordinate clause in Malay, since there is no scope-marker.

2. Arguments by Cole and Hermon (1998)

2.1 Covert scope-marker.

Cole and Hermon (1998) postulate that since other languages that allow for partial *wh*-movement have an overt scope-marker, a covert scope-marker should be assigned for Malay.

2.2 Islandhood test.

Their argument is based on the following two examples:

(86) Ali memberitahu kamu tadi [CP apa$_i$ yang [IP Fatimah baca t$_i$]]?

Ali tell you just now what that Fatimah read

'What did Ali tell you just now that Fatimah was reading?'

Although the *wh*-phrase overtly moves to the Specifier position of the subordinate clause, it still obeys islandhood constraints - the *wh*-phrase is within the subordinate clause.

Furthermore, in moving from the complement position of the verb *baca* (*read)* to the Specifier position of the subordinate clause, it does form a *wh*-island. So partially moved *wh*-phrases fulfill the requirements of the first test devised by Cole and Hermon (1998) with regard to islandhood - *wh*-movement does form a *wh*-island.

But consider the ungrammatical construction given below:

(87) *Kamu sayang [perempuan yang Ali fikir [apa_i yang telah makan t_i]]?

you love woman that Ali thinks what that already eat

'You love the woman who Ali thinks ate what?'

Notice that although the partially moved *wh*-phrase abides by islandhood restrictions(it is in the same island and does form a *wh*-island through movement), the construction is ungrammatical. The only difference between (86) and (87) is that in (87) there is an intervening island boundary between the surface position of the partially moved *wh*-phrase and the Specifier position of the matrix clause.

This brings Cole and Hermon (1998) to the conclusion that although overt movement of the partially moved *wh*-phrase is only to the Specifier position of the subordinate clause, there is further covert movement to scopal position. So (86) is grammatical because nothing blocks the covert movement of the *wh*-phrase to Spec CP.

2.3 *Meng-* deletion.

Cole and Hermon (1998) indicate a problem with this analysis. Their arguments elucidated above fail to be substantiated by their second test for determining movement - the deletion of the *meng-* prefix. The example below exemplifies this:

(88) Ali memberitahu kamu tadi [apa_i yang Fatimah (*mem) baca t_i]?

Ali meng-told you just now what that Fatimah (*meng) read

'What did Ali tell you just now that Fatimah was reading?'

The *meng-* prefix is only deleted in the domain over which the *wh*-phrase has moved overtly. In the scopal CP position, the prefix is maintained. If there is covert movement of the *wh*-phrase, then the prefix in the matrix verb should also be deleted.

2.4 Covert movement.

To solve this issue of the lack of *meng-* deletion and still maintain that there is covert movement to the Specifier position, Cole and Hermon (1998), in accord with McDaniel's (1989) proposal, designate a *wh*-scope-marker in scopal CP. They further suggest that this would be a phonologically null *wh*-expletive, that is, a dummy constituent that does not have any semantic content but is used for checking features.

The null *wh*-expletive will be able to conveniently check the strong features of Q in the matrix Complementizer. First, the *wh*-phrase moves overtly to the CP of the subordinate clause and the *meng-* prefix is deleted in the subordinate clause. Covert movement then takes place in LF to replace the null expletive. Since PF features would already be processed, this LF-movement cannot be manifested in the pronunciation. As such, the *meng-* prefix in the matrix clause will not need to be deleted.

3. My Arguments for Feature Movement

3.1 Problems with clausal pied-piping.

Cole and Hermon (1998) suggest that at LF, the partially moved *wh*-phrase has to raise and replace the null expletive. By creating a null scope-marker, they are attempting to pattern partial *wh*-constructions in Malay with those in other languages that have a scope-marker. But if this is the case, then as it is with the other languages considered this far, there cannot just be a movement of the *wh*-word. Instead, the entire clause headed by the *wh*-word must be pied-piped to the matrix position to replace the scope-marker clause. So the LF representation of example (88) should be:

(89) [Apa$_i$ yang [IP Fatimah baca t$_i$]]

The meaning of the sentence would be altered since the matrix clause is replaced. An attempt to replicate the movement of the partial *wh*-clause in languages with scope-markers might not work in Malay.

3.2 LF movement more local than overt movement.

Boskovic (1998a) shows that LF movement should be just feature movement. But to have the *wh*-word covertly move to replace the null expletive as Cole and Hermon (1998) indicate, there must be more than just feature movement. To covertly replace the scope-marker, there would need to be movement of everything except the phonological features. This would mean more than just the movement of the [+*wh*] feature.

Boskovic (1998a) uses French *wh*-in-situ questions to show that LF movement is more local than overt movement. For example:

(90) Tu as vu qui?
you have seen whom
'Who did you see?'

Boskovic (1998a) claims that in French *wh*-in-situ constructions, C with a strong [+*wh*] feature is inserted at LF. Since strong features must be checked and deleted immediately, there is LF *wh*-movement of the *wh*-in-situ and the [+*wh*] feature of C is checked. So the *wh*-in-situ cannot be unselectively bound. If it is, then the strong [+*wh*] feature would not be checked off and deleted.

Two concepts brought out by Boskovic must be emphasized. First, LF movement is strictly feature movement. This will be in keeping with the Economy Principle. It would be more economical to move just features than to move the entire phrase. Second, unlike Malay, the *wh*-in-situ in French is not unselectively bound because of the need to check the strong [+*wh*] feature of C. But this LF movement is more constrained than overt movement. The following two sets of examples indicate this:

(91) *Jean et Pierre croient que Marie a vu qui?

Jean and Pierre believe that Maire has seen whom

'Whom do Jean and Pierre believe that Marie saw?'

(92) Qui Jean et Pierre croient-ils que Marie a vu?

whom Jean and Pierre believe that Marie has seen

'Whom do Jean and Pierre believe that Marie saw?'

(93) ?*Jean ne mange pas quoi?

Jean neg eats neg what

'What doesn't John eat?'

(94) Que ne mange-t-il pas?

what neg eats neg

'What doesn't John eat?'

(91)is ungrammatical because LF movement is clause bounded. The *wh*-in-situ has to have its [+*wh*] feature move across clause boundaries to check the strong [+*wh*] feature of C. This movement across clauses results in the unacceptability of the sentence. But as shown by the grammaticality of (92), overt movement is not clause bounded. Similarly with (94), overt movement can occur across negation, but LF movement, as seen in (93), cannot.

Boskovic (1998a) uses these examples to show that LF movement is actually more local than overt movement. The ungrammaticality of (91) and (93) can be repaired as demonstrated by the following two examples by Boskovic:

(95) Qui croit que Marie a vu qui?

who believes that Marie has seen whom

(96) Qui ne mange pas quoi?

who neg eats neg what

The overt *wh*-phrase in Spec CP can check the strong [+*wh*] feature of C. So the *wh*-in-situ does not need to move in LF. The *wh*-in-situ can then be unselectively bound. The same is argued for (96) with the sentential negation.

Interestingly, the similar constraints are found in partial *wh*-movement in Malay. Note the two examples below (the first example is a repetition of example (87)):

(97) *Kamu sayang [perempuan yang Ali fikir [apa_i telah makan t_i]]?

You love woman that Ali think what has eat

'You love the woman that Ali thinks ate what?'

(98) *John tidak memberitahu kamu tadi apa_i Mary baca t_i ?

John not tell you just now what Mary read

'What did John not tell you that Mary was reading just now?'

(97) is ungrammatical because there cannot be an intermediate clause that acts as a barrier in between the Spec CP and the partially moved *wh*-phrase. (98) is ungrammatical because negation is also a barrier between the matrix CP and the subordinate clause.

Stepanov (in press) provides similar examples with *wh*-scope marking questions in Slavic. He shows that *wh*-scope marking across negation is ungrammatical:

(99) *Jak nie my lisz, co studenci czytaj

how not think what students read

(100) *Kak vy ne dumaete, to ita jut studenty?

how you not think what read students

'What don't you think that the students read?'

McDaniel (1989), in a similar vein, provides examples that prove that *wh*-scope-marking across an intermediate CP is also ungrammatical. She gives the following German example:

(101) *Was glaubst [IP du [CP dass [IP Hans meint [CP [mit wem$_i$] [IP Jacob t_i gesprochen hat]]]]]?

'WHAT do you believe [that Hans thinks] with whom Jakob talked?'

All these examples seem to indicate that Boskovic's (1998a) arguments are valid. There is LF movement of the partially moved *wh*-phrase to the matrix CP but this LF movement must be local movement.

Boskovic's (1998a) arguments provide interesting possibilities for Malay partial *wh*-movement. I would like to claim that as in French in-situ *wh*-phrases, there is a strong [+*wh*] feature of C that is inserted at LF in Malay partial *wh*-movement constructions. This forces the partially moved *wh*-phrase to undergo LF movement.

Consider however the difference between this argument and that made by Cole and Hermon (1998). I do not think that there is a need to postulate a null *wh*-scope-marker. As stated earlier, in order to replace this scope-marker at LF, more than just feature movement would be needed. Since movement at LF is necessarily feature movement, this might be a possible problem.

However, in line with Boskovic's (1998) argument, since there is a strong [+*wh*] feature of C inserted at LF, I suggest that just the [+*wh*] feature of the partially moved *wh*-word needs to move. This is LF movement and so it would not affect PF. As also shown by Cole and Hermon (1998), the *meng*- prefix would then not need to be deleted.

3.3 Pesetsky's (1999) arguments.

There are also the arguments presented by Pesetsky (1999) that explain feature movement. Pesetsky discusses Chomsky's (1995) Minimalist idea that movement is actually a repair strategy. There is an uninterpretable feature F on a head K and this uninterpretable feature is deleted by movement to K of a matching uninterpretable feature F'. However, this is the only movement that is needed for the derivation to converge.

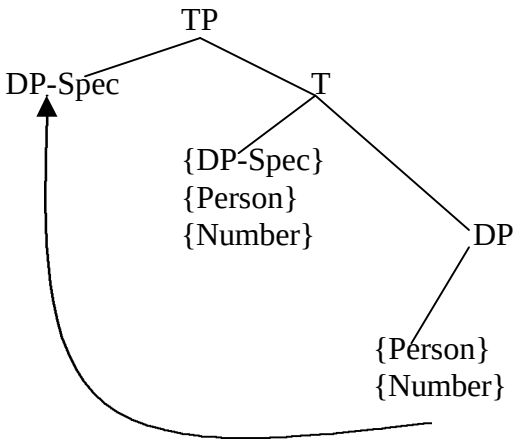
Movement of anything more would be superfluous and so is banned. Overt or covert phrasal movement is only motivated when the grammatical features that need to move cannot be separated from the remainder of the syntactic expression. As such, the rest of the expression that it labels must be pipe-piped along with the grammatical features. With Malay partial *wh*-constructions, movement of just the [+*wh*] feature would be all that is needed for the derivation to converge.

Pesetsky (1999) exemplifies feature movement using the English *there*-construction. The verb in the existential *there*-construction generally agrees with the post-verbal Determiner Phrase (henceforth DP). Note the two examples he provides:

(102) There is a book on the table.

(103) There are some books on the table.

Merging the *there* as the specifier of the Tense Phrase (henceforth TP) satisfies the need for Tense (the tense head constituent in clauses; henceforth T) to have a DP Specifier. However, *there* does not contain the person and number features that T has and needs to delete. The only way for T to check its person and number features is if these features move from the post-verbal DP - *a book/some books*. Example (104) shown below illustrates this:



Pesetsky (1999) also exemplifies the structure of (101) and (102) this way:

(105) There [F-is] [F-a book] on the table.

(106) There [F-are] [F-some books] on the table.

The hypothesis that there is a movement-like relation between the verb and the post-verbal DP is further supported by the fact that c-command relations must be maintained between the T and the DP. Consider these set of examples:

(107) He said there [F-were] likely to be [F-several books] on the table.

(108) *He said there [F-were] and likely to be [F-several books] on the table.

In example (108) the verb *were* does not c-command the post-verbal DP *several books*. This renders the construction ungrammatical. Furthermore, there cannot be an intervening clause separating the verb and the post-verbal DP. This DP has to be the closest DP to T. Note the following example:

(109) *There are [desirable for it to be] several semanticists at the party.

These two factors are very similar to factors considered earlier in languages with scope-markers like Russian, Polish and German. Similar constraints were noted between the *wh*-scope-marker and the partially moved *wh*-phrase.

Interestingly, this was also observed with partially moved *wh*-phrases in Malay. Although there is no scope-marker in the matrix clause, a c-command connection must be maintained between the matrix CP and the subordinate CP and the relation between the two cannot be maintained if there is an intervening clause.

So I attempt to show that like the English *there*-construction, there is covert feature movement of the partially moved *wh*-phrase in Malay. It is covert feature movement and not covert phrasal movement, because it is movement of something smaller that the entire subordinate clause. In the English *there*-construction, it is movement of

person and number features. In the partially moved *wh*-phrases in Malay, it is the movement of just the [+*wh*] feature.

This is the difference between the movement postulated for partial *wh*-movement in languages that have scope-markers and partial *wh*-movement in Malay. In the former, the covert movement is movement of the entire *wh*-phrase but in the latter, it is just the feature movement of the *wh*-word. As stated earlier, Cole and Hermon (1998), in modelling their arguments with the patterns observed in partial *wh*-movement languages that have scope-markers, are claiming that in Malay as well, the covert movement is not feature movement, but covert phrasal movement. I have attempted to show that this is not necessary in Malay partial *wh*-movement constructions.

Pesetsky (1999)gives further evidence of feature movement. In multiple questions in English, the Superiority Effect prevents a *wh*-word from crossing over or being preposed over another *wh*-word. Note the following two examples Pesetsky provides:

(110) Who$_i$ did you persuade t_i to read what?

(111) ?? What$_i$ did you persuade who to read t_i ?

The Superiority Condition requires that it be the highest *wh*-word before movement that moves to the leftmost position. In the examples given above, this would be the *who.* Moving of the *what* will mean that the *what* must cross over the *who* to get to the leftmost position, thus violating the Superiority Condition. This would account for the ungrammaticality of (111).

Chomsky (1995) gives this another label - Attract Closest. Chomsky defines Attract Closest as:

(112) Attract Closest

A can raise to target K only if there is no legitimate operation Move B targeting K, where B is closer to K.

However, D-linked questions in English seem to violate Attract Closest. These are questions where the answers consist of a set of individuals that is familiar to both speaker and hearer or a context that is common to both of them. Pesetsky (1999) provides these examples:

(113) Which person$_i$ t_i bought which book?

(114) Which book$_i$ did which person buy t_i ?

(113) abides by Attract Closest because it is the highest *wh*-phrase before movement and it moves to the leftmost position without crossing over any other *wh*-phrase. (114) is a D-linked question and it is grammatical. However, by moving wh2 first, the Superiority Condition is violated, and as a natural consequence, so is Attract Closest.

The problem can be resolved if it is possible to prove that *wh*1 actually moves first - but the movement is covert feature movement. Pesetsky (1999) proves just that in his paper. He shows that although the first phrasal movement is overt phrasal movement, this is not the first instance of *wh*-movement. He postulates that there is Multispecifier Complementizer (henceforth C mSpec) and so it can attract more than one *w*h-phrase. This Multiple Specifier is only needed when more than one *wh*-phrase moves. Since in D-linked questions like (114) it is claimed that both the *wh*-phrases move, a C mSpec is validated.

If this argument is valid - if there is feature movement of the *wh*-in-situ in D-linked questions like (114) - then Attract Closest is not violated at all. It is just that feature movement is covert and so it appears as if *wh*2 is crossing over *wh*1. The only difference between (113) and (114) is whether the movement of *wh*1 is feature movement or overt phrasal movement.

However, this brings up another problem. If D-linked questions can have feature movement of *wh*1 and overt phrasal movement of *wh*2, then the same should be possible

for non D-linked questions. Thus, Pesetsky (1999) shows that examples such as the one below should be grammatical:

(115) Who(wh1)$_i$ bought t_i what(wh2)?

(116) *What(wh2)$_i$ did who(wh1)$_j$ buy t_j t_i ?

If we attempt a parallel argument for non D-linked questions, then for sentence (115) it should be possible to have *wh*1 undergo feature movement first, then *wh*2 undergoes overt phrasal movement. The ungrammaticality of the construction clearly indicates that this is not what is happening. Instead, the fact that the sentence is ungrammatical indicates that Attract Closest has been violated. This also serves to prove that *wh*1 does not undergo covert phrasal movement. If the covert copying of the *wh*-phrase had indeed occurred, then there would be no reason to claim that Attract Closest has been violated.

A parallel argument is made with regard to Bulgarian multiple questions. The asymmetry between D-linked questions and non D-linked questions is explained by looking these multiple questions in Bulgarian:

(117) Koj kakvo na kogo dade?
who what to whom gave
'Who gave what to whom?'

(118) ?? Koj na kogo dade kakvo?
who to whom gave what

(119) ?? Koj kakvo dade na kogo?
who what gave to whom

(120) ** Koj dade kakvo na kogo?
who gave what to whom

(117) is the most natural and grammatical construction because there is overt movement of all the three *wh*-phrases. (118) and (119) have two *wh*-phrases overtly moved, so these

are less acceptable sentences. However, (120) has only one *wh*-phrase overtly moved and it is the most unacceptable sentence. As noted earlier, since these are multiple questions, there is a C mSpec, and it is an interrogative head that can attract more than one *wh*-phrase.

But as sentences (117), (118), (119) and (120) clearly indicate, it is not just that C mSpec can attract more than one *wh*-phrase; it seems to require at least two *wh*-specifiers. When at least two *wh*-phrases move, (118) and (119) are fairly acceptable. But when it is just one *wh*-phrase that moves, the construction is totally bad. So it is a requirement that C mSpec has more than one *wh*-specifier.

Pesetsky's (1999) argument is that in English, the first *wh*-phrase undergoes feature movement while the second *wh*-phrase undergoes overt phrasal movement. Feature movement is actually just an attraction operation - the features that are carried by one constituent are inherited by another constituent. So in this case, only the relevant *wh*-feature is attracted. To satisfy the Multiple-Specifier requirement, Pesetsky argues that there must be actual movement of the phrases - an overt (as in Bulgarian), or covert copying of at least two phrases into specifier position.

The Bulgarian examples of (117) - (120) capture this requirement of C mSpec well. Since the English example (116) consists of just two *wh*-phrases and one is claimed to undergo feature movement, the requirement on the specifiers of C mSpec is violated and the construction is ungrammatical.

However, D-linked questions are an exception to this requirement of C mSpec. Pesetsky does not specify the reason but shows how D-linked questions are different from normal multiple questions in English. Consider example (114) repeated here:

(121)Which book did which person buy?

Unlike a normal multiple question in English, D-linked questions do not receive a pair-list answer. The example above elicits a single pair response. The analysis provided by Boskovic (1989b) shows that normal multiple questions in English have only a pair-list response and cannot have a single-pair response. D-linked questions like (121) are an exception. So when a D-linked phrase is formed with C mSpec, it is not viewed as a normal multiple question and so it is an exception to the requirement that C mSpec must have more than one *wh*-specifier.

This can be further suggested by Bulgarian examples. Pesetsky (1999) shows that just as D-linking in English is an exception to the Multiple-Specifier requirement, when Bulgarian questions like (120) where only one *wh*-phrase overtly moves, are understood as being D-linked, then the acceptability is significantly improved. The same is true with binary questions in Bulgarian:

(122) Koj dade kakvo na Stefan?

'Who gave what to Stefan?'

As in English, this question is acceptable and is an exception to the Multiple-Specifier requirement, as long as it is understood as being D-linked.

Pesetsky (1999)uses another test with non binary multiple questions to prove that except for D-linked questions, the C mSpec requires at least two *wh*-phrases that undergo phrasal movement. When there are more than two *wh*-phrases, it should be perfectly acceptable to have the first *wh*-phrase undergo *wh*-feature movement, as long as the other two are phrasal movements. Specifically, it should be possible for the highest *wh*-phrase to be the first to undergo movement but have this as feature movement since the other two *wh*-phrases can undergo phrasal movement. Pesetsky provides a clear example of this in English:

(123) What $(wh2)_i$ did who give t_i to whom (wh3)?

This construction is perfectly grammatical (although Superiority Condition/Attract Closest seems to have been violated) because there are three *wh*-phrases. The reason for this is that *wh*1 is actually the first to move but this is feature movement. This movement satisfies Attract Closest. Then there are two phrasal movements - the overt phrasal movement of *wh*2 and the covert phrasal movement of *wh*3. As such, the Multiple-Specifier requirement is also satisfied.

3.4 Does feature movement really involve movement?

By the Multiple-Specifier requirement, feature movement is not recognized as movement at all, since there is no copying of the phrase; there is just the attraction of the relevant features. So maybe only phrasal movement should be considered to be *wh*-movement and feature movement is not really *wh*-movement. This is an important issue to consider, because my arguments with partially moved *wh*-phrases in Malay indicate that there is *wh*-feature movement at LF of the *wh*-word to the matrix CP.

First, consider some Bulgarian examples with three *wh*-phrases. In Bulgarian, there is multiple overt movement of the *wh*-words. Pesetsky (1999) argues that like multiple questions in English, Bulgarian has a C mSpec that allows it to attract more than one *wh*-phrase. Interestingly, Pesetsky's Bulgarian examples also abide by the Superiority Condition. So the Superiority Condition seems to be a crosslinguistic constraint. The first *wh*-phrase to move in the Bulgarian examples is the highest *wh*-phrase and it moves to the leftmost position of the matrix clause. This is illustrated below:

(124) Koj kakvo vi da?
who what sees
'Who sees what?'

(125) *Kakvo koj vi da?

what who sees

*‘What does who see?’

Since the Superiority Condition follows naturally in English from Attract Closest, it should be the case that in Bulgarian multiple *wh*-questions, the positions of these *wh*-phrases after movement would be a mirror image of their position before movement. In other words, the closest or first *wh*-phrase would be moved first to the leftmost position and then the next closest *wh*-phrase would be tucked in underneath the first *wh*-phrase.

But this is not exactly true. It is true that the highest or closest *wh*-phrase before movement must be moved first to the leftmost position. However, the second *wh*-phrase to move is not necessarily the second highest *wh*-phrase before movement. So the mirror order - *wh*1 *wh*2 *wh*3 is possible but the order *wh*1 *wh*3 *wh*2 is also acceptable. This is exemplified below:

(126) Koj kogo kak udari?

who whom how hit

(127) Koj kak kogo udari?

who how whom hit

Pesetsky (1999) explains this optionality using Richards’ (1997) Principal of Minimal Compliance (henceforth PMC).

(128) Principle of Minimal Compliance (Richards 1997):

For any dependency D that obeys constraint C, any elements that are relevant for determining whether D obeys C can be ignored for the rest of the derivation for purposes of determining whether any other dependency D’ obeys C.

With regard to the optionality in movement noted with examples (126) and (127), the Principle of Minimal Compliance would indicate that the first movement of the highest *wh*-phrase ‘pays Attract Closest tax’ or satisfies the Attract Closest constraint. As such,

subsequent elements that move to this same target can ignore the constraint. Richards' (1997) also exemplifies the PMC using islandhood requirements:

(129) *Koja kniga otre e senator*t [ma*lvata e iska dasabrani ____]?
which book denied senator the rumor that wanted to ban
'Which book did the senator deny the rumor that he wanted to ban?'

(130)?Koj senator koja kniga otre e ___ [ma*lvata e iska da zabrani __]?
1st 2nd
'Which senator denied the rumor that he wanted to ban which book?'

Both questions violate the Subjacency Constraint. In (129), the first movement is the only instance of movement which is an extraction out of the complex NP, so it directly violates the Superiority Condition. However, the second construction is more acceptable than the first. In (130) the first movement of *which senator* satisfies the Subjacency constraint, thus making the second movement of *which book* that violates Subjacency unrecognizable as belonging to the class of structures to which this constraint applies.

I will consider later how these facts about Bulgarian help in ascertaining whether feature movement really exists. For now it is sufficient to use these examples as evidence for PMC and move on to consider some other English multiple question constructions. Pesetsky (1999) examines English constructions where there are three *wh*-phrases like in (123) repeated below:

(131) What(wh2)$_i$ did who give t_i to whom?

If it is true that *wh*1 undergoes feature movement and if feature movement is not *wh*-movement at all or if it not does involve movement at all, then the Superiority Condition would mark *wh*1 as invisible to movement. In that case, *wh*2 would automatically be considered the highest *wh*-phrase and so it would have to be the first instance of movement, since it is the closest attractable *wh*-phrase.

On the other hand, if there is feature movement and feature movement is a valid *wh*-movement operation, then feature movement of *wh*1 would satisfy the Attract Closest requirement. As such, according to the PMC and the Bulgarian examples examined earlier, other instances of movement would be able to ignore this constraint and so either *wh*2 or *wh*3 can be next instance of phrasal movement. However, *wh*2 and *wh*3 must be instances of phrasal movement because normal multiple questions must satisfy the Multiple-Specifier requirement.

The examples indicate that the latter proposal is true – that feature movement is a valid *wh*-movement operation. Pesetsky (1999) provides more evidence to support the latter claim with the following set of examples from English:

(132)Who(wh1)$_i$ t_i gave what to whom?

(133)What(wh2)$_i$ did who give t_i to whom?

(134)?Who(wh3)$_i$ did who give what to t_i ?

(132) has *wh*1 moving overtly so it clearly satisfies the Attract Closest condition. But the fact that either *wh*2 or *wh*3 can appear as the first instance of movement as noted in (133) and (134) shows that there must be *wh*-feature movement of *wh*1. Only in this way can Attract Closest be satisfied. After that, it fails to matter if *wh*2 or *wh*3 is moved first.

The fact that there is a free choice as to which *wh*-phrase moves after Attract Closest is satisfied is also confirmed by the Bulgarian examples we looked at earlier - examples (126) and (127). After the movement of the highest *wh*-phrase, PMC indicates that either *wh*2 or *wh*3 can be the next to move. The fact that there is a parallel choice with non-binary *wh*-phrases in English indicates that *wh*1 must have moved to satisfy Attract Closest and in doing so, PMC as well. This movement of *wh*1 is feature movement. As such, feature movement is proven to be a real *wh*-movement operation.

This provides added evidence for my argument that there is feature movement of

the partially moved *wh*-word in Malay to the matrix position. Furthermore, there is more evidence to indicate that feature movement involves real *wh*-movement.

3.5 *Meng*- deletion.

But Richards' (1997) PMC is also useful in solving another issue with regard to partially moved *wh*-phrases in Malay. Consider Cole and Hermon's (1998) arguments on movement based on *meng*- deletion facts. I argued earlier that because the [+*wh*] feature of C is inserted in the matrix CP at LF, the subsequent movement of the corresponding [+*wh*] feature of the partially moved *wh*-word would not affect PF and so there would be no need for *meng*- deletion. Cole and Hermon suggest this option and this is one possibility. However, there could also be another reason for the lack of *meng*- deletion in the matrix verb in Malay.

Perhaps Richards' (1997) PMC can be applied with regard to partially moved *wh*-phrases and the *meng*- prefix deletion facts brought out by Cole and Hermon (1998).Their example is repeated below:

(135) Ali memberitahu kamu tadi yang apa_i Fatimah baca t_i?

Ali told you just now that what Fatimah read

'What did Ali tell you just now that Fatimah was reading?'

In accord with the PMC, perhaps the overt movement of the *wh*-phrase to the subordinate CP position satisfies the *meng*- deletion constraint. As such, the following covert feature movement of the *wh*-feature to the matrix CP position can ignore the *meng*- deletion constraint via PMC. This would be a second way of explaining the lack of *meng*- deletion in partially moved *wh*-phrases in Malay.

So I have attempted to provide two arguments for the lack of *meng*- deletion in partially moved *wh*-phrases. One, if the strong [+*wh*] feature of C is inserted at LF, the movement of the *wh*-feature of the partially moved *wh*-word would occur at LF. This

movement is after PF considerations, so it would not affect the phonological structure of the sentence. The *meng-* prefix in the matrix verb would not need to be deleted.

Two, Richards' (1997) PMC indicates that once the first instance of a constraint is satisfied, subsequent instances of the constraint can be ignored. So the first instance of *meng-* deletion is satisfied in the subordinate clause and the second instance of *meng-* deletion in the matrix clause can be ignored.

4. Conclusion

Partial *wh*-movement in Malay is not similar to partial *wh*-movement in other languages like Polish, Russian, German and Romani. Unlike these other languages, there is no overt scope-marker in Malay. So Cole and Hermon's (1998) arguments, based on these other languages that have an overt scope-marker, might not be valid. Instead, based on Boskovic's (1998a) discussion, I attempt to show that there is no need for a covert scope-marker in Malay. Instead a strong [+*wh*] feature of C is inserted at LF and so just the [+*wh*] feature of the partially moved *wh*-word needs to move to the matrix Specifier position. Furthermore, Pesetsky's (1999) arguments serve to provide further proof for the existence of feature movement.

The lack of *meng-* deletion could be because the [+*wh*] feature movement to the matrix clause is LF movement and so it would not affect PF. It could also be explained with Richards' (1997) PMC.

CHAPTER 5

A WHOLE DIFFERENT WAY OF LOOKING AT THIS!

1. Ross' (1971) Arguments

Partial *wh*-movement in Malay could be looked at in a different way and this is based on Ross' (1971) argument on performative verbs. His paper provides clear evidence for the performative analysis, that is, that declarative sentences that do not have performative verbs are implicitly performatives and are derived from deep structures that have a performative main verb. He provides examples like the following two:

(136) Prices slumped.

(137) I sentence you to two weeks in The Bronx.

So Ross (1971) argues that these two sentences have the same deep structure in that both sentences have a performative main verb. He notes that this would be similar to sentences like the following:

(138) I order you to go.

(139) Go!

Both sentences are performatives - the only difference is that in (138) the performative is explicit because the ordering is made clear with the use of the verb *order* while in (139) it is implicit because although this is still an order, the verb *order* is not explicitly present in the sentence.

One argument for the performative analysis is based on the claim that deep structures of declarative sentences have a higher subject NP I. To prove this, Ross (1971) first shows that if one clause of a sentence contains a verb like *say* with some subject NP1, then a later clause can have the verb *believe* followed by NP1 too. He exemplifies this:

(140) Tom told her that Ann could swim, but nobody believed a.*them

b.*her

c. him

The fact that (140) (a) is ungrammatical indicates that the pronoun that is the object NP of *believe* must have an anaphoric relationship with some other NP in the sentence. However the ungrammaticality of (140) (b) indicates that the pronoun following *believe* cannot be in an anaphoric relationship with just any NP (like *Ann*) but it must refer back to a subject of a particular class of verbs.

Ross (1971) goes on to illustrate that these are verbs like *said, told, explained, wrote,* that are contrasted with verbs like *know, hope, feel*. The former is different from the latter verbs in that the former has all main verbs denoting linguistic communication. This is not just restricted to oral communication since the verb *write* is also included in this class of verbs. Instead these are verbs that describe communication based on language. Furthermore as opposed to verbs like *ask, command* or *order*, these main verbs are also declarative, not imperative. So the features of these verbs can be summarized as being [+communication +linguistic +declarative].

Ross (1971) argues from example (140) (c) that a human anaphoric pronoun can be the object of the verb *believe* only if this NP is in an anaphoric relationship with another NP that is the subject of a verb that is [+communication +linguistic +declarative]. Now Ross provides the crucial evidence for the performative analysis with the following example:

(141) Ann can swim; but if you don't believe a. me just watch her.

b. *them

The fact that *believe* has the NP pronoun *me* but cannot have the NP pronoun *them* indicates that the anaphoric pronoun *me* is in an anaphoric relationship with another NP. It cannot be *Ann* because there is no verb following Ann that is [+communication

+linguistic +declarative]. As such, there must be a underlying verb that is like the verbs *told*, *wrote*, e*xplained* with an underlying subject *I*. As such the underlying structure of (141) would be:

(142) I told you / I say that Ann can swim; but if you don't believe me just watch her.

These sentences provide further proof for the performative analysis.

2. Effects of Ross' (1971) Arguments on Partial *Wh*-Movement in Malay

The facts about main verbs like *say* or *told* provide an interesting argument for partial *wh*-movement in Malay. Consider the following examples:

(143) John memberitahu kamu tadi (yang) apa Mary baca?
John told you just now (that) what Mary read
'What did John tell you just now that Mary was reading?'

(144) *John tahu/percaya yang apa Mary baca?
John know/believe that what Mary read
'What does John know/believe that Mary is reading?'

(145) John tahu/percaya apa Mary baca.
John know /believe what Mary read
'John knows/ believes what Mary is reading.'

Example (143) is a grammatical partial *wh*-construction. The *yang* or *that* is optional and so is in brackets. With or without the *yang*, (143) remains a partial *wh*-construction. In (144) and (145) the main verb has been changed. In (143) the main verb is [+communication +linguistic +declarative]. Now in (144) and (145) it is [-communication +linguistic +declarative]. When the verb is changed, (144) becomes ungrammatical because it has the *yang* and (145) is grammatical because *yang* is no longer present. However the crucial point is that now, although (145) is grammatical, it is no longer a partial *wh*-question. Instead, it is a statement.

So perhaps partial *wh*-constructions in Malay are not really partial *wh*-constructions at all. The optionality observed in (143) that is, for the *wh*-phrase to either remain in-situ or to move to the CP position of the subordinate clause is actually determined by the type of main verb.

On the other hand, it could also be argued that this analysis by Ross (1971) as to the type of main verb would also provide us with a test to determine if as argued earlier, there is covert feature movement of the *wh*-feature to the Specifier position of the matrix CP. The fact that (143) can still remain as a question, indicates that there must be an underlying Q with a [+*wh*] feature in the matrix clause. So then there is the feature movement of the *wh*-feature of the *wh*-phrase to the matrix position in order to check this Q feature. However this Q morpheme seems to be only present with verbs of the kind [+communication +linguistic +declarative].

So it seems that when verbs of this kind are present as main verbs, the *wh*-phrase has optional positions - it can either stay in situ or move to the next Specifier position or the matrix Specifier position. This again emphasizes that it would then not really be a partial *wh*-construction like in other languages that allow for partial *wh*-movement and have overt scope markers.

As indicated in example (145), when other verbs that do not bear the features [+communication +linguistic +declarative] are used, that is verbs like *tell/believe*, there is no covert Q morpheme and so first of all, there is no need for further covert feature movement and second, the construction does not have a question reading because there is no question operator to begin with.

3. Conclusion

It might be possible to claim that there is no real *wh*-movement in Malay like there is in other languages like English. In the arguments given earlier it was suggested that the *wh*-in-situ is unselectively bound; so it does not involve *wh*-movement.

With full movement of the *wh*-phrase it has been suggested that this is actually a clefting operation. Finally now with the framework provided by Ross (1971), partial *wh*-movement in Malay might not really be a partial *wh*-construction like with languages like Russian and Polish. Instead the fact that there are optional positions for the *wh*-phrase in Malay could just be a result of the type of main verb that is being used. Optional positions of the *wh*-phrase are allowed when the main verb is [+communication +linguistic +declarative]. When any of these features are not fulfilled, then as example (145) indicates, the partial movement of the *wh*-phrase either loses its force as a question and is just a declarative or as indicated in example (144) the derivation becomes ungrammatical.

CHAPTER 6

CONCLUSION

So the three types of *wh*-constructions in Malay have been considered - *wh*-in-situ, full overt *wh*-movement and partial *wh*-movement. In my arguments I have attempted to show that the *wh*-in-situ does not move at all, not even covertly but rather, that it is unselectively bound in its base position. I also tried to explain that the full overt movement of the *wh*-phrase is not actually a *wh*-movement operation but a clefting operation. As for the partial *wh*-construction, I claim that there is overt movement to the subordinate CP but that partial *wh*-constructions in Malay are very different from partial *wh*-constructions in other languages because there is no scope-marker. As such we cannot apply the same arguments that are used for these other languages that have a scope-marker. Instead I have tried to show that in line with Boskovic's (1998a) arguments, there is feature movement of just the *wh*-feature of the partially moved *wh*-word to the matrix position to check and erase the strong [+*wh*] feature of C.

Then there is a completely different set of arguments based on Ross' (1971) arguments on performative verbs. Using Ross' line of reasoning opened up new possibilities with regard to *wh*-movement in Malay. I argue that there might not even be a real partial *wh*-construction in Malay since it is actually two different slots for the *wh*-phrase if the main verb is [+communication +linguistic +declarative]. Taking this reasoning further still, I suggest that perhaps there is no actual *wh*-movement in Malay. The partial movement is movement dependent on the type of main verb, the *wh*-in-situ in unselectively bound and the overtly moved *wh*-phrase is a clefting operation.

It might have been neater to come up with a symmetrical framework for all these three question formations. Perhaps I could have attempted to show that in all three types of positions of the *wh*-phrase in Malay, there is *wh*-movement to the matrix clause - either

overt or covert movement. But I hope that this asymmetrical analysis of the data would help to widen views on the different possibilities available in coming up with a strong syntactic framework for *wh*-questions in Malay.

ENDNOTES

[1] Since the presence or absence of the *meng-* prefix seems to be a very complex question deserving of a separate discussion by itself, I try not to include the *meng-* prefix in most of my examples. I only attach it to the verb in two situations. First, when using the verb *beritahu* (so I state it as *memberitahu*) because I personally find it awkward to say it without the *meng-* prefix. Second, I use it when specifically discussing the relation of the *meng-* prefix to *wh*-movement in Malay.

[2] This discussion on scope-marking does not explore and explain all the theoretical aspects of scope-marking. Instead, this is merely an attempt to replicate certain scope-marking tests that have been conducted by linguists, particularly Boskovic (1998b).

[3] It is important to emphasize that the availability of these different readings are not agreed upon by all speakers. There is some individual variation on this point.

[4] Here again, I have found some variability among speakers.

[5] Haj Ross points out how this is not exactly true with lawyerese questions. In lawyerese questions, both the lawyer and the person being questioned know the answer but need to have it said aloud to put it on record and in order to pursue their defense. So it is possible in a court of justice, for a lawyer to ask the person on the stand: 'All right Mrs. Jones - you put what where?' A question such as this elicits the single-pair response.

[6] Once again, the *meng-* prefix is not inserted.

[7] There were some variability among speakers.

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